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CENTRAL FAX CENTER
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Application No. 09/994465 (Docket: DT.0103-CP1)
37 CFR 1.111 Amendment dated 01/16/2007
Reply to Office Action of 11/02/2006

AMENDMENTS TO THE SPECIFICATION

Please delete the section entitled "SUMMARY OF THE INVENTION" in its entirety and substitute the following section therefor:

SUMMARY OF THE INVENTION

[0014] The present invention provides a superior technique for configuring optimization scenarios, determining a set of optimum prices corresponding to the scenarios, and displaying the set of optimum prices for multiple sets of highly related products within a product category. Contrasted with present day optimization systems that consider only gross figures in their respective optimizations, prices according to the present invention can be optimized to maximize merchandising figures of merit (e.g., net profit) that take into account demand chain costs associated with the products.

[0015] In one embodiment, an interface enabling a user to determine optimum prices of products for sale is provided. The interface has a scenario/results processor. The scenario/results processor enables a user to prescribe an optimization scenario, and presents the optimum prices to the user, where the optimum prices are determined by execution of the optimization scenario by an optimization engine coupled to said scenario/results processor, and where the optimum prices are determined based upon estimated-product demand estimated by said optimization engine and calculated activity based costs. The scenario/results processor has an input/output processor and a scenario controller. The input/output processor acquires data corresponding to the optimization scenario from the user, and distributes optimization results to the user. The input/output processor includes and template controller and a command interpreter. The template controller is configured to provide first price optimization templates and second price optimization templates, where the first price optimization templates are presented to the user to allow for prescription of the optimization scenario, and for distribution of the optimization results. The first price optimization templates include a plurality of new scenario templates, configured to enable the user to prescribe scenario parameters corresponding to the optimization scenario. The plurality of new scenario templates include a category template a products template, and includes an at-large rules template.

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~~The category template is for specifying a product category for price optimization. The product category includes a plurality of demand groups, each of the plurality of demand groups is configured to categorize a set of highly correlated products. The products template is for specifying the products for sale, where the products for sale span more than one of the plurality of demand groups. The at-large rules template is for specifying rules to govern determination of the optimum prices. The rules include maximum allowable price swing for each of the products for sale and maximum allowable swing for average price of each demand group within the plurality of demand groups. The command interpreter is configured to extract commands from the first price optimization templates executed by the user, and is configured to populate the second price optimization templates according to result data provided for presentation to the user. The scenario controller is coupled to the input/output processor, and controls acquisition of the data and distribution of the optimization results in accordance with a price optimization procedure, where the price optimization procedure relaxes constraints of lower priority conflicting rules to render the optimization scenario feasible.~~

[0016] One aspect of the present invention contemplates a method for providing an interface to an apparatus for optimizing the prices of products for sale. The method includes utilizing a computer-based scenario/results processor within an optimization server to present a sequence of data entry templates to a user, whereby the user specifies an optimization scenario, the optimization server optimizing the prices according to modeled-market demand for the products and calculated demand chain costs for the products. The utilizing includes ~~first providing a category template, for specifying a product category for price optimization, where the product category includes a plurality of demand groups; second providing a products template, for specifying the products for sale for which the optimum prices are to be determined, where the products for sale span more than one of the plurality of demand groups; third providing a time horizon template, for prescribing a time period for which the optimum prices are to be determined; fourth providing a locations template, for prescribing a plurality of store groups for which the optimum prices are to be determined, wherein said prescribing directs said optimizing to utilize data corresponding to the plurality of said store groups when determining the~~

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~~optimum prices; fifth~~first providing an at-large rules template, for specifying rules to govern determination of the optimum prices, wherein the rules specify maximum allowable price swing for each of the products for sale, and maximum allowable swing for the average price of each demand group within ~~the plurality~~a plurality of demand groups; and ~~sixth~~second providing a configured rules template, for prioritizing the rules, wherein, if particular rules conflict, the optimization server optimizes the prices by progressively relaxing constraints prescribed by lower-priority rules; and selectively limiting the number of prices that are optimized. The method also includes, within an optimization engine that is coupled to the computer-based scenario/results processor, estimating the market demand and calculating the demand chain costs for the products. The method ~~also includes~~further includes generating a plurality of optimization results templates and providing these templates to the user, where the optimum prices are presented.